

ART. XXXIII.—*Notes and Descriptions of New Zealand Lepidoptera.*

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CARADRINIDAE

Aletia gourlayi n. sp.

♂. 35 mm. Head and thorax grey. Palpi ochreous-grey with black hairs laterally. Antennae serrate, ciliate, 1. Abdomen ochreous-grey. Legs ochreous-grey, tarsi obscurely banded with darker. Forewings, costa straight, apex rectangular, termen bowed, waved, oblique; *bluish-grey mixed with fuscous-brown*; lines whitish, obscure, indicated by fuscous margins; basal line very obscure, indicated chiefly by two blackish dots on costa; first line irregular, narrowly margined with fuscous which becomes prominent on costa as two blackish dots; orbicular circular, narrowly ringed with darker; *a rather prominent dentate curved brownish-fuscous median line*; reniform obscurely ringed with whitish followed by dark fuscous; a pair of black dots on costa above reniform; second line faint, evenly serrate, irregularly curved; subterminal irregularly serrate, anteriorly dark-margined, suffusedly on costa and, in a lesser degree, on dorsum; a terminal series of crescentic black dots: cilia ochreous mixed with fuscous and white; an obscure waved median line. Hindwings fuscous: cilia whitish-ochreous.

A neat and handsome species, distinguished from its allies by the delicate silvery-grey ground-colour.

Arthur's Pass. Several taken at flowers of *Dracophyllum* sp. in February by Mr. E. S. Gourlay, of Christchurch. Type in the discoverer's collection.

Melanchra fenwicki n. sp.

♂. 37 mm. Head, palpi, and thorax reddish-brown. Antennae reddish-brown, bipectinated, apex simple, pectinations $3\frac{1}{2}$. Abdomen greyish-brown, lateral and anal tufts reddish-ochreous. Legs reddish-brown, tarsi obscurely annulated with paler. Forewings moderate, costa slightly sinuate, termen evenly rounded, oblique; *dark reddish-brown*; an obscure basal fascia mixed with blackish; *stigmata ringed with ochreous-white, faintly margined with black*; orbicular circular, well defined; claviform sub-circular, obscure; reniform upright, regular; subterminal line parallel with termen, thin, slightly and irregularly serrate, ochreous-white, suffusedly margined anteriorly with brownish-black: cilia uniform reddish-brown. Hindwings and cilia pale reddish-fuscous, tips of cilia whitish.

Nearest to *M. insignis* (Walk.), but differing entirely in the form of the subterminal line and the longer antennal pectinations.

Dunedin, in September. One specimen, taken by Mr. C. C. Fenwick, after whom I have named the species, and in whose collection the type remains.

HYDRIOMENIDAE.

Xanthorhoe clandestina n. sp.

♂. 35 mm. Head and palpi grey-whitish. Eyes olive-brown. Antennae dark grey, pectinations 5 but appearing shorter owing to being basally appressed to the shaft. Thorax grey. Abdomen whitish-grey. Forewings elongate-triangular, costa sinuate, apex bluntly pointed, termen straight, oblique; *bluish-grey; lines faintly indicated in darker*; an irregular basal line at $\frac{1}{6}$; first line at $\frac{1}{3}$, double, slightly waved; discal spot rather elongate, transverse, dark; a fairly straight, slightly waved, median line; second line from $\frac{2}{3}$ costa to $\frac{3}{4}$ dorsum, excurved on upper half, faintly margined with white on veins: cilia white, basally mixed with grey. Hindwings grey, slightly darker round termen: cilia white.

The bluish-grey colour of this species recalls the much larger *X. subobscurata* (Walk.), but the latter differs in the presence of ochreous and whitish shades.

Arthur's Pass, in February. I am indebted to Mr. E. S. Gourlay for the opportunity of describing this species, he having captured a single specimen which, so far, remains unique. Type in the collection of its discoverer.

Xanthorhoe helias obscura n. subsp.

♂♀. 26–30 mm. Head and palpi ochreous, the latter usually darker. Antennae, shaft whitish-ochreous, pectinations darker. Thorax ochreous, tinged with reddish on shoulders. Abdomen ochreous mixed with fuscous, anal tuft bright ochreous. Legs whitish-ochreous, anterior pair suffused with fuscous. *Forewings dull fuscous shading to ochreous along costa*; first and second lines distinct, narrow, white; subterminal thin, whitish, sometimes partially obsolete: cilia pink. Hindwings ochreous, apical half fuscous; second line prominent, irregular, whitish, anteriorly fuscous-margined; one or two parallel ochreous lines sometimes follow second line, and there are indications occasionally of preceding lines also: cilia pink.

The Hump (Waiau), late in February. The males are fairly common in a damp scrub-filled gully, but only one female was taken. The latter sex is remarkable in having both fore and hind wings much narrowed.

I should not hesitate to accord this form specific rank but for the fact that some of the specimens, by loss of the fuscous colouring, approach the typical *helias*. It cannot be said from the material at hand, however, that the two forms really link up.

Notoreas arcuata n. sp.

♀. 27 mm. Head, palpi, and thorax golden-yellow with some whitish scales. Antennae black, annulated with whitish. Abdomen black, segmental divisions whitish. Legs ochreous-whitish, strongly infuscated, tarsi annulated with ochreous. Forewings triangular, apex obtuse, termen bowed, oblique; *dark fuscous, densely irrorated with yellow*; lines narrow, white, sometimes yellow-tinged; a basal line anteriorly broadly margined with black, curved, distinct, slightly irregular; first line strongly curved, irregular, posteriorly margined with black; a black discal dot; an obscure irregular yellow median line; second line anteriorly broadly margined

with black and followed by narrow yellow margin indented above and below middle; subterminal irregular, dilated on costa and at middle, yellowish above dorsum: cilia white, prominently barred with blackish. Hindwings and cilia as forewings but basal line absent and subterminal wholly yellow. Undersides reproducing markings of upper surfaces but with the lines much broader and the basal area of costa suffused with clear yellow.

Mr. G. V. Hudson has two examples, both taken at Arthur's Pass, the first in December, 1908. Mr. R. Grimmett has a single specimen, captured on the St. Arnaud Range, Nelson.

Differs from *Notoreas mechanitis* (Meyr.) in the less triangular forewing, the costa being more arched; the form of the second line is also quite different. It is possible that when the male is discovered the species will have to be placed in *Dasypuris*. Type in Mr. Grimmett's collection, to whose kindness I am indebted for the opportunity of describing the species.

MONOCTENIADAE.

Adeixis griseata (Huds.), *Trans. N.Z. Inst.*, vol. 35, p. 244, pl. 30, fig. 5.

Having received, through the kindness of Mr. George Lyell, of Gisborne, and Dr. Jefferis Turner, of Adelaide, a number of examples of *Adeixis inostentata* (Walk.), I have come to the conclusion that the New Zealand insect hitherto regarded as being identical with the Australian species is distinct, and therefore should be known as *A. griseata* (Huds.). Walker's material came from various parts of Australia, as did also Warren's, who redescribed the species under the name of *Adeixis insignata* (Nov. Zool., 4, p. 27). *A. griseata* (Huds.) differs from *A. inostentata* (Walk.) chiefly in the well-marked white lines beneath costa and from apex to dorsum at $\frac{1}{2}$. In my "List of the Lepidoptera of Otago" (*Trans. N.Z. Inst.*, vol. 49, p. 210) I refer to *griseata* (under the name of *inostentata*) as being probably of recent Australian origin, having been found only in the vicinity of the Port of Bluff. Since the publication of the list, however, the species has been taken by Mr. G. V. Hudson and Mr. C. E. Clarke at remote localities in the North Island, and I have also met with it at Lake Manapouri. I am much indebted to Mr. H. Hamilton, of the Dominion Museum staff, for assistance in the matter of literature relating to the Australian insect.

SELIDOSEMIDAE.

Selidosema modica n. sp.

♂. 30–31 mm. Head and palpi brownish-grey mixed with white, pectinations 12. Thorax brownish-fuscous mixed with white, collar ochreous. Abdomen grey. Forewings triangular, costa gently arched, subsinuate, apex rectangular, termen rounded, more oblique on lower half; fuscous-brown; first line obscure, sharply angled outwards beneath costa, whitish; an obscure blackish discal dot; second line from $\frac{2}{3}$ costa to $\frac{2}{3}$ dorsum, upper half straight, lower half incurved, white; a broad clear brown band following second line; subterminal indicated by a series of white dots, preceded and followed by black ones, on veins; a series of black dots round termen: cilia brown mixed with whitish and grey. *Hindwings whitish-grey, densely sprinkled with darker*; a dark discal dot; an irregular series of blackish dots round termen: cilia grey-whitish.

Resembling *S. productata* (Walk.), but at once distinguished by the grey hindwings, those of the former species being always more or less ochreous. The antennal pectinations are also shorter in *modica*.

Port Hills, Christchurch, in February. Two males captured by Mr. E. S. Gourlay, who kindly presented one to me. The type is in the collection of Mr. Gourlay.

GELECHIADAE.

Gelechia dividua n. sp.

♂ ♀. 9-12 mm. Head whitish-grey. Palpi grey, infuscated beneath. Antennae blackish. Thorax brown. Abdomen grey, ochreous-tinged basally. Legs fuscous-grey. Forewings narrow, costa slightly arched, faintly sinuate on apical half, apex round-pointed, termen extremely oblique; *brownish-grey*; a *black central streak from base to before $\frac{1}{2}$, attenuated apically*, sometimes margined beneath with ochreous; a *similar streak commencing slightly above and beyond basal streak and continuing to apex*, evenly widening from acute base: cilia brownish-grey. Hindwings shining grey-whitish: cilia as in forewings.

Near *G. monophragma* Meyr., but the ground-colour is much darker and the median black streak is not continuous as in that species.

Six specimens forwarded by Mr. C. C. Fenwick. Four of these are from Paradise, Lake Wakatipu, taken on the 1st January, and two from Alexandra, Central Otago, captured a fortnight later. Type in Mr. Fenwick's collection.

OECOPHORIDAE.

Borkhausenia seclusa n. sp.

♂. 16-17 mm. Head and palpi grey, palpi infuscated beneath. Antennae grey, obscurely annulated with blackish. Thorax fuscous-grey, shoulders brown. Abdomen greyish-brown. Legs ochreous-grey, tarsi infuscated. Forewings rather elongate, costa moderately arched, apex rounded, termen strongly oblique; *brownish-grey mixed with white and fuscous*; *stigmata fuscous*, first and second discal in a line, obscurely white-margined; plical before first discal, submerged in oblique fuscous fascia from dorsum to beneath first discal; a subterminal curved fuscous line, indented beneath costa, submerged in brownish-fuscous patch above tornus and reappearing on dorsum before tornus as a triangular spot, broadly margined with white on upper portion; space above apical half of dorsum broadly suffused with white: cilia grey mixed with fuscous, round apex wholly fuscous. Hindwings and cilia grey.

Nearest *B. crotala* Meyr., but greyer than that species and without any ochreous admixture. The hindwings are also darker.

Known from the Wakatipu district only so far. A single male captured on Ben Lomond in December, and another secured at Lake Luna a few days afterwards. Both specimens were taken at elevations of from 1,500 ft. to 2,000 ft.

Izatha acmonias n. sp.

♂ ♀. 25-28 mm. Head white. Palpi white. Antennae brownish-black. Thorax white, anterior margin, a triangular central anterior mark, and a posterior spot black. Legs black, posterior tibiae grey, tarsi narrowly

annulated with white. Forewings moderate, costa rather strongly arched basally, apex rounded, termen gently rounded, slightly oblique; *white, markings black*; a broad basal band including a minute spot of white next thorax, outer edge nearly straight to fold, thence produced along fold to an acute point, from whence it returns inwardly oblique to dorsum; an irregular fascia from costa at $\frac{1}{4}$ to fold before $\frac{1}{2}$, its apex turned inward along fold and almost connecting with basal band, a strong inward tooth beneath costa and a similar outward one at middle; a strong fascia from costa at $\frac{1}{2}$ to before tornus, having two prominent inward projections, the first beneath costa and the second, which points obliquely downwards, at middle; an irregular spot on tornus at $\frac{2}{3}$; a series of three spots, the central one twice the size of the others, between central fascia and apex; a small spot beneath first costal spot, and a larger one, touching central fascia, beneath this; a broad inwardly-oblique fascia from apex, somewhat constricted and then expanding as a triangular patch; a series of terminal dots, becoming progressively larger towards tornus: cilia white. Hindwings grey clouded with fuscous; an indistinct discal spot: cilia light fuscous-grey, a broad white bar beneath apex and an obscure dark basal line.

Practically the only difference between *I. acmonias* and *I. picarella* (Walk.) is the greater breadth of the transverse fasciae and other black markings in the former. It is usually a larger insect, but the smallest individuals are no greater in wing-expanse than the largest of *picarella*.

November and December. Rather rare, but distributed throughout the lowland forest country of the South Island. Several years ago this species was sent by Mr. G. V. Hudson to Mr. E. Meyrick, who gave it the MS. name of *acmonias*. He did not, however, publish a description, having subsequently arrived at the conclusion that the form was not specifically distinct from *picarella* (Walk.). I therefore adopt Mr. Meyrick's suggested name, my experience of the insects having convinced me of their distinctness.

TINEIDAE.

Taleporia cawthronella n. sp.

♂. 9 mm. Head and thorax ochreous-grey. Palpi whitish. Antennae grey annulated with black, ciliations 3. Abdomen grey-fuscous. Legs grey-whitish. Forewings, costa slightly arched, faintly sinuate, apex rounded, termen strongly oblique; whitish-grey, slightly ochreous and irrorated with fuscous especially on basal $\frac{3}{4}$; base of costa irregularly brownish-black to $\frac{1}{4}$; a rather large brownish-black spot on costa at $\frac{1}{2}$; three smaller brownish-black spots on costa on apical $\frac{1}{3}$; an irregular transverse brownish-black discal spot; a series of small blackish-brown spots round termen: cilia grey-whitish. Hindwings and cilia fuscous-grey.

Maitai Valley, Nelson. A large number bred from larvae found on the face of a gravelly cutting by the side of the Maitai River. Many hundreds of the larvae were to be found at this one spot, but search in similar situations in this and other valleys failed to result in the discovery of other colonies. The larva inhabits a case constructed of the fragments of a species of white lichen. The case is irregularly pyriform in shape, rough on the surface, and, when containing a full-grown larva, about 6 mm. long by 3.5 mm. broad. It is a rather fragile shelter, being easily pulled to pieces. In travelling, the head and thorax are projected from the case, and when a foothold is secured the case is lifted clear of the surface and drawn forward.

Should the case catch on a projection an extra high lift is given to clear the obstacle. The larvae began to pupate about the end of June, the first moth appeared on the 3rd August, and emerging continued till the middle of October. When preparing for pupation the larvae attaches the apex of its case to the surface of a stone or the stem or leaf of some plant. The attachment is not rigid, but permits the case to swing in all directions. The head of the pupa is well separated from the thorax, and the legs reach quite to the extremity of the abdomen. On the dorsal surface of the last abdominal segment there is a transverse row of stout recurved spines; these probably serve to keep the pupa from slipping from the case when the emergence of the imago is taking place.

As this is the first new species to be reared in the insectarium of the Cawthron Institute, I have thought it fitting to give it a name serving in some degree to mark the circumstance. The type and paratypes are in the collection of the Institute.

MICROPTERIGADAE.

Sabatinca ianthina n. sp.

♂ ♀. 9-10.5 mm. Head clothed with long bright ochreous hair. Antennae blackish, annulated with ochreous on basal half. Thorax ochreous mixed with black. Abdomen black, sparsely clothed with whitish-ochreous hair. Legs fuscous, tarsi annulated with ochreous. Forewings broadly lanceolate, apex less acute in ♀; *dark metallic violet*; a band of pale lemon-yellow at base; *a lemon-yellow band before $\frac{1}{2}$, faintly excurved, and dilated slightly on dorsal half*; a variable series of lemon-yellow dots on costa between median band and apex, and a similar series on dorsum, usually two in each case but sometimes four or five: cilia greyish-fuscous. Hindwings dark metallic violet, fuscous basally: cilia as in forewings.

A very handsome and distinct species.

Dun Mountain, Nelson, at about 2,000 ft. A fair number were taken on a rocky slope covered with various species of mosses and liverworts. Many plants of a species of *Gahnia* grew on the spot, and the moths were nearly all taken by sweeping from this plant. Search on *Gahnia*, however, in other situations where no moss or liverwort was present failed to produce any moths, so that it is probable that the food plant of the species will be found to be a moss or a liverwort.
